植 物 分 类 学 报 33 (1): 76—85 (1995)
Acta Phytotaxonomica Sinica

中国菊科千里光族新植物*

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THE NEW SPECIES OF THE TRIBE SENECIONEAE (COMPOSITAE) FROM CHINA

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Key words Compositae; Tribe Senecioneae; *Sinosenecio saxatilis*; *Synotis changiana*; *S. cordifolia*; *S. otophylla*; *Parasenecio tongchuanensis*

关键词 菊科；千里光族；岩生华千里光；肇骞尾药菊；心叶尾药菊；耳柄尾药菊；东川假千里光

1 岩生华千里光 新种 图1

Sinosenecio saxatilis Y. L. Chen, sp. nov.

Species habitu *S. fanjinshanico* C. Jeffrey et Y. L. Chen affinis, a quo planta pusilla glabra vel subglabra; lamina foliorum reniformi, 5-palmatifida glabra; capitulo solitario; phyllariis involucri 11—13, dorso glabris facile differt.

Herba scapiformis perennis, rhizomate brevi tenui, erecto vel adscendenti, collo reliquis petiolorum nigro-brunneis praedito, radices fibrosas numerosas edente. Caulis solitarius, erectus, 3—7 cm altus, simplex, glaber vel subglaber. Folia basilaria rosulata, sub anthesi viva, longe petiolata; lamina subcoriacea, reniformis, 0.5—1 cm longa, 1—1.5 cm lata, 5 (—7)-palmatifida, lobis ovato-triangulatis, apice acutis, mucronulatis, basi cordata vel rarius subtruncata, margine in sicco reflexa, supra viridis, subtus purpurascens, utrinque glabra, inconspicue 5-palmatinervis, petiolis tenuibus, basi leviter dilatatis, dense flavo-tomentosis, superne sparse puberulis; folia caulina 1—4, inferiora oblanceolata vel spathulata, integra vel interdum trifida, breviter petiolata, suprema bracteiformia, linearia, 2—3 mm longa, sessilia. Capitulum radiatum, ad apicem caulis solitarium, 10—15 mm in diametro. Involucrum late campanulatum, 5 mm longum, 7—8 mm latum, externe ecalyculatum; phyllaria involucri uniseriata, 11—13 in numero, herbacea, oblongo-lanceolata, c. 1 mm lata, apice acuta vel acutiuscula, margine anguste scariosa, dorso glabra, inconspicue trinervi-

* 1993-06-09 收稿。

a. Flosculi ligulati 11—13, tubo 2 mm longo, ligulis flavis, oblongis, 5—6 mm longis, 1—1.5 mm latis, apice tridenticulatis, 5-nervibus ei tubulosi numerosi, corolla flava, 3—3.5 mm longa, tubo c. 1 mm longo, limbo campanulato, lobis 5, ovato-lanceolatis, acutis. Antherae oblongae, basi obtusae; styli rami recurvati, apice truncati, papillosi. Achaenia cylindrica, c. 1 mm longa, glabra; pappi setae albae, 2 mm longae.

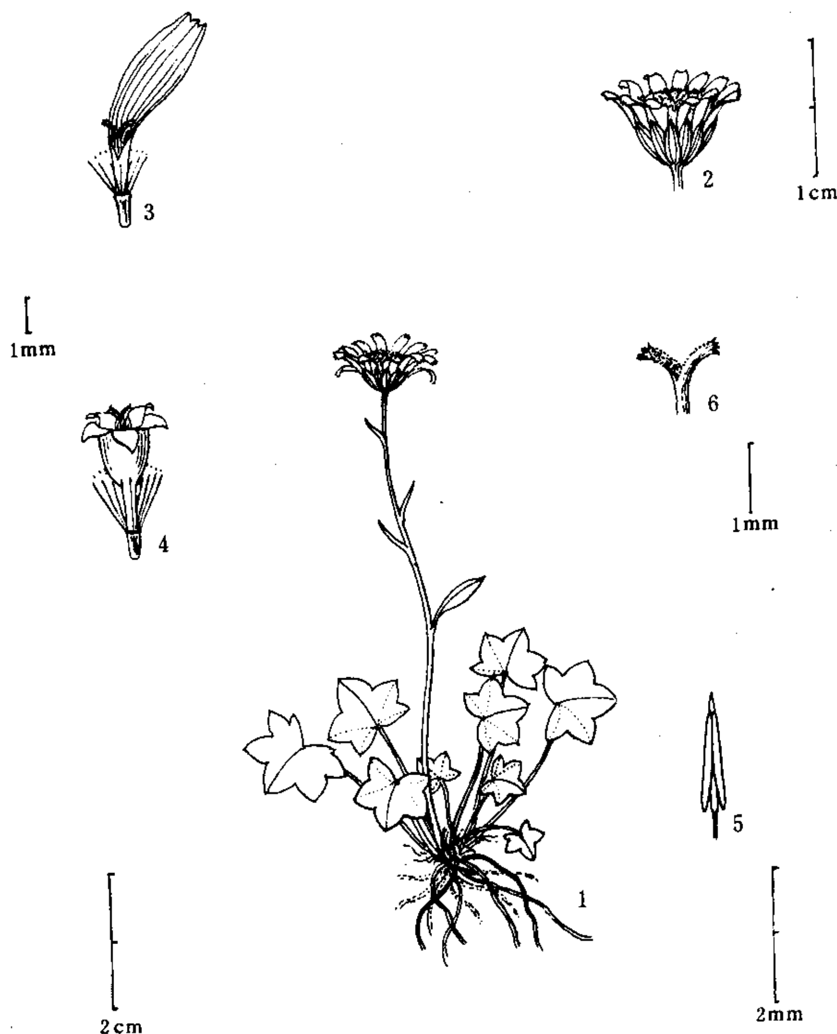


图 1 岩生华千里光 1. 植株; 2. 头状花序; 3. 舌状花; 4. 管状花; 5. 花药; 6. 花柱分枝。(张泰利绘)
Fig. 1 *Sinosenecio saxatilis* 1. habit; 2. capitulum; 3. ray-floret; 4. disc-floret; 5. anther; 6. style-arms.

Guangdong (广东): Ruyuan (乳源), Baimakeng, Shijouling (白马坑,石韭岭), in rupestris ad apicem montis, alt. 1650 m, 1973-06-14, Guangdong 73 (holotypus IBSC); ibidem, alt. 1200 m, 1973-05-30, Jiu Hwau-xin (邱华兴) 342.

本种外形近似梵净华千里光,但茎极矮小,无毛或近无毛;叶片肾形,掌状 5 浅裂;头状花序单生;总苞片 11—13,背面无毛,与后者容易识别。

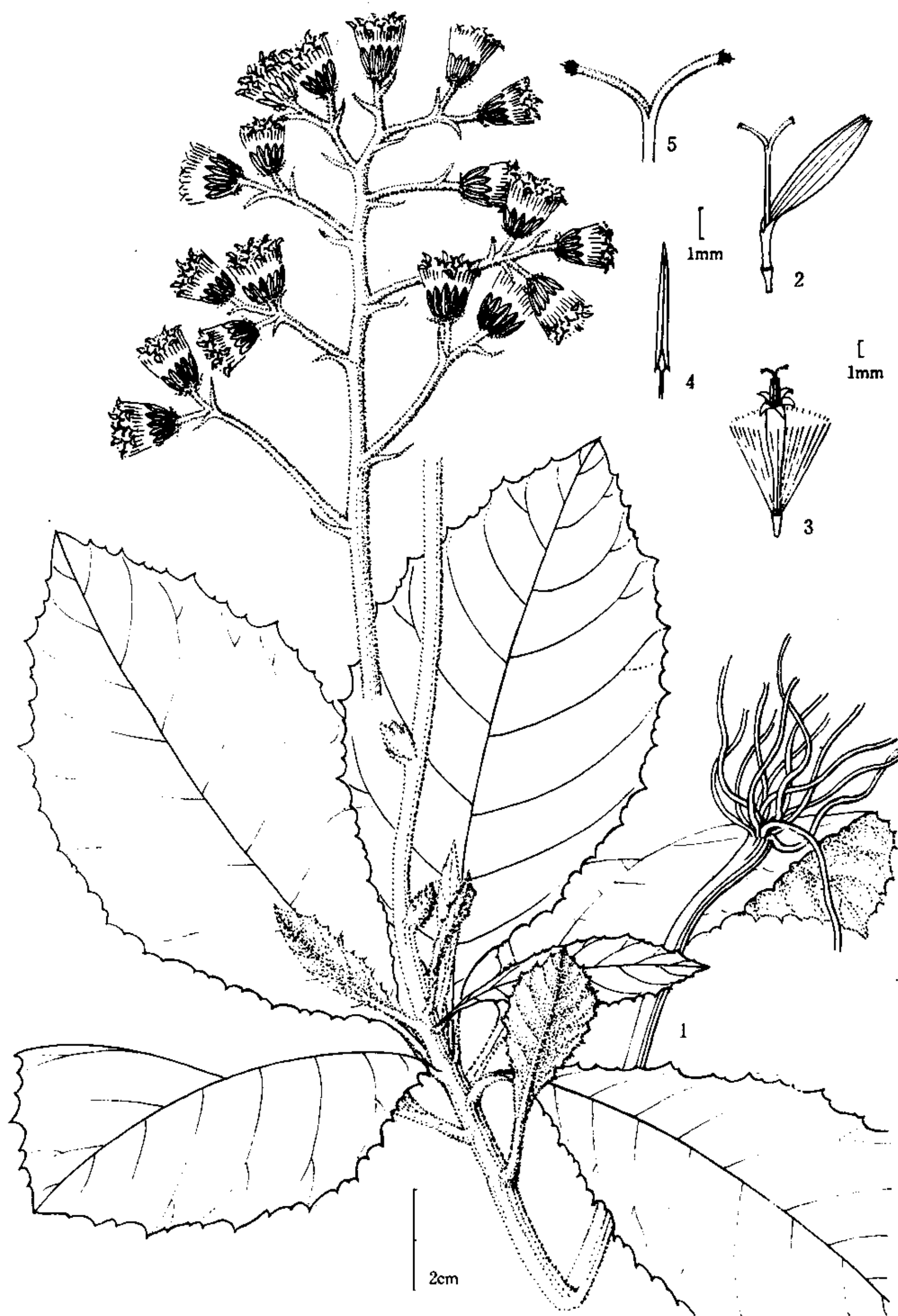


图2 肇骞尾药菊 1. 植株；2. 舌状花；3. 管状花；4. 花药；5. 花柱分枝。（张泰利绘）
Fig. 2 *Synotis changiana* 1. habit; 2. ray-floret; 3. disc-floret; 4. anther; 5. style-arms.

2 肇骞尾药菊 新种 图2

Synotis changiana Y. L. Chen, sp. nov.

Species habitu et forma foliorum *S. fulvipedi* (Ling) C. Jeffrey et Y. L. Chen similis, sed a qua foliis infra medium caulis confertis, subtus dense cinereo-arachnoideo-tomentosis; capitulis numerosis, 2—5 ad apicem caulis vel ad ramos inflorescentiae cymosim dispositis; phyllariis involucri 9—11 bene differt; a *S. damiaoshanica* C. Jeffrey et Y. L. Chen foliis obovato-spathulatis vel elliptico-obovatis, margine irregulariter repando-serratis, subtus cinereo-arachnoideo-tomentosis differt.

Herba perennis, rhizomate crasso ad 2 cm in diam., radices fibrosas tomentosas numerosas emittente. Caulis erectus, 40—50 cm altus, simplex, teres, basi 3—4 cm in diametro, inferne longe nudus, primum araneosus demum plus minusve glabrescens, superne flavo-tomentosus. Folia plerumque infra medium caulis conferta, rosularia vel subrosularia, breve petiolata; lamina papyracea, obovato-spathulata vel elliptico-obovata, 8—14 cm longa, 4—7.5 cm lata, apice obtusa vel breviter acuta, versus basin late cuneata vel cuneata, margine irregulariter repando-serrata, dentibus nigro-mucronulatis, nervis lateralibus 7—9-jugis, arcuatis, supra in sicco atro-viridis, araneosa, deinde sensim glabrata, subtus cinereo-araneoso-tomentosa; petiolis crassis 1.5—2.5 cm longis, dense tomentosis; folia superiora minuta, bracteoformia, decrescentia, linearia, sessilia. Capitula radiata, multiflora, plerumque 2—5 ad apicem caulis vel ad ramos inflorescentiae cymosim disposita, pedunculis dense fulvo-tomentosis ad 4 cm longis, subsessilis vel breviter pedicellata, basi bracteolis linearibus, 5—7 mm longis, apice acutis. Involucrum campanulatum, 8—10 mm longum, 10—12 mm latum, basi fulvo-tomentosum, calyculatum, bracteolis 7—8, lineari-subulatis, subaequilongis; involucri phyllaria 9—11, herbacea, oblongo-lanceolata, 8—10 mm longa, 2.5—3 mm lata, apice acutiuscula vel obtusa, inconspicue 3-nervulola, margine late scariosa, dorso glabra. Flosculi ligulati 5—6, tubis tenuibus, 3—3.5 mm longis, ligulis flavis, oblongis c. 5 mm longis, 1—1.5 latis, apice tridendiculatis, 4—5-nervibus; ei tubulosi flavi 7—8 mm longi, tubis 2—3 mm longis, limbo anguste infundibulari, lobis oblongo-lanceolatis, acutis. Antherae lineares, 3—4 mm longae, basi longe caudatae, collo filamenti leviter dilatato; styli rami recurvati, 1.5 mm longi, apice obtusi, papillosi. Achaenia (immatura) cylindrica, 2 mm longa, glabra; pappi setae albae, 7—8 mm longae.

Guangxi (广西): Yangsho (阳朔), Jinbao (金宝), in sylvis sparsis, 1963-11, Liang Nai-kuen et Huang Tseng-zen (梁乃宽、黄增任) 45765 (Typus, GXMI); Linchuan (灵川), 1977-10-18, Lin Chuan Group (灵川组) 6-2170.

本种体态和叶形与褐头尾药菊 *S. fulvipes* (Ling) C. Jeffrey et Y. L. Chen, 但叶密集于茎中下部,背面密被在白色蛛丝状绒毛;头状花序多数,2—5 个在茎端或花序分枝顶端聚伞状排列;总苞片 9—11,与后者极易区别;叶倒卵状匙形或椭圆状倒卵形,边缘有不规则波状锯齿,背面被灰白色蛛丝状绒毛,与大苗山尾药菊 *S. damiaoshanica* C. Jeffrey et Y. L. Chen 不同。

3 心叶尾药菊 新种 图 3

Synotis cordifolia Y. L. Chen, sp. nov.

Species *S. erythropappae* (Bur. et Franch.) C. Jeffrey et Y. L. Chen valde similis, sed a qua foliis subcoriaceis, cordatis, margine irregulariter grosse dentatis, subtus ad nervos flavo-puberulis facile differt.

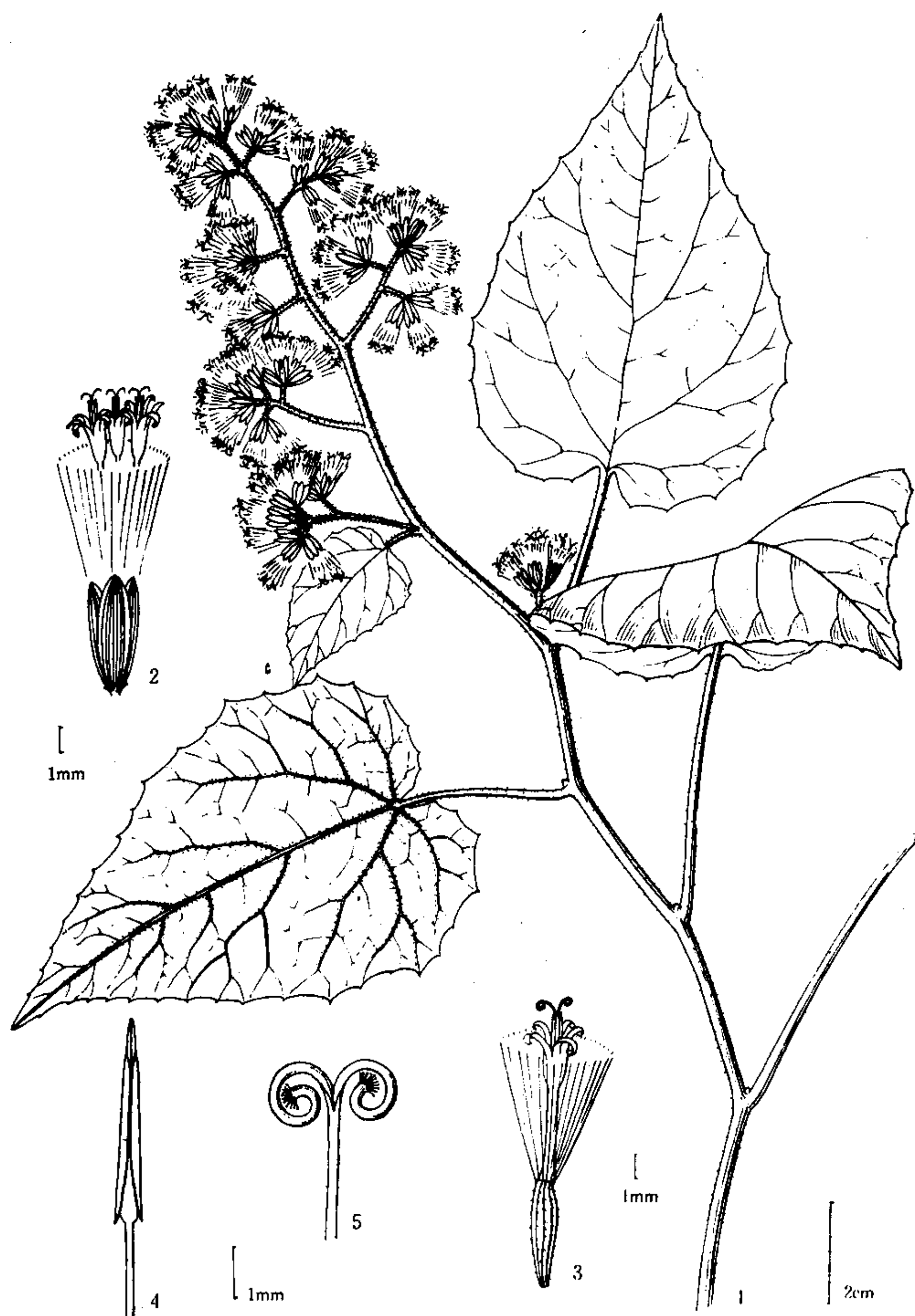


图3 心叶尾药菊 1. 植株; 2. 头状花序; 3. 管状花; 4. 花药; 5. 花柱分枝。(张泰利绘)
Fig. 3 *Synotis cordifolia* 1. habit; 2. capitulum; 3. disc-floret; 4. anther; 5. style-arms.

Herba perennis; rhizoma ignotum. Caulis erectus, 40—70 cm altus, conspicue striatus, simplex, flexuosus, dense cinereo-pubescens vel demum subglaber. Folia longe petiolata; lamina ovato-cordata vel cordata, subcoriacea, 9—13 cm longa, 6—10 cm lata, apice acuminata vel acuta, basi cordata, margine irregulariter grosse dentata, dentis late triangulatis, mucronulatis, subrepando-dentata, 5-palmatinervia, costa nervisque subtus conspicue prominentibus, supra viridis glabra, subtus secus nervos flavo-puberula; petiolus 4—8.5 cm longus, basi leviter dilatatus, sparse puberulus. Capitula discoidea, numerosa ad apicem caulis et in axillis foliorum superiorum pyramidali-paniculata vel cymoso-paniculato-disposita, pedunculis 3—6 mm longis dense brunneo-puberulis. Involucrum cylindricum, 1.5—2 mm latum; phyllaria involucri 3, subcoriacea, oblonga, 1.5—2 mm lata, apice obtusa vel rarius bidenticulata, margine late scariosa, dorso glabra, obscure 3—6-nervulosa. Flosculi 3, omnes tubulosi, disco conspicue longiores; corolla flava, 5—6 mm longa, tubo 2.5—3 mm longo, limbo infundibulari, lobis oblongo-lanceolatis, apie acutis, papillosis. Antherae lineares, 2—3 mm longae, basi longe caudatae, collo filamenti crasso, basi leviter dilatato; styli rami recurvati, apice obtusi, papillosi. Achaenia cylindrica, 3—4 mm longa, glabra, costata; pappi setae rubescentes, 5—6 mm longae.

Yunnan (云南): Dongchuan (东川), Mozi Mt. (磨子山), alt. 3000 m, in sylvis misturatis, 1984-10-28, Lang Shun-bin (蓝顺彬) 307 (Typus, PE).

本种近似红缨尾药菊 *S. erythropappa* (Bur. et Franch.) C. Jeffrey et Y. L. Chen, 但叶近革质，心形，边缘有不规则粗齿，背面沿脉被黄色微柔毛，与后者容易区别。

4 耳柄尾药菊 新种 图 4

Synotis otophylla Y. L. Chen, sp. nov.

Species habitu *S. muliensi* Y. L. Chen similis, sed a qua petiolis foliorum ad basin foliiforme ampliatis, auriculato-amplexicaulibus; involucri phyllariis purpureis brevioribus; flosculis discum conspicue superantibus, flavo-purpureis; pappi setis brunneis praecipue differt.

Herba perennis, rhizomate lignoso obliquo radices validas-numerosas emittens. Caulis erectus, 60—65 cm altus, superne ramosus, basi 3—4 cm in diametro, teres, striatus, purpurascens, minute pubescens. Folia longe petiolata, basilaria sub anthesi emortua; lamina papyracea, inferiora triangulato-ovata vel triangulato-hastata, 8—10 cm longa, 8—9 cm lata, apice acuta vel acuminata, basi profunde cordata vel subsagittata, margine irregulariter dentata, mucronulata, 5-palmatinervia, supra viridis, subtus pallide purpurea, utrinque sparse adpresse brunneo-pilosa, petiolis 4—5 cm longis, sparse breviter pilosis, basi foliiformi-ampliatis, auriculato-amplexicaulibus, margine denticulatis mucronulatis; folia superiora minora; lamina ovata vel lata ovata, 4—5 cm longa, 4—4.5 cm lata, apice acuta vel acutius-cula, basi leviter cordata truncatave, margine irregulariter dendata mucronulata, utrinque brunneo-pilosula, petiolis 1.5—3.5 cm longis, brunneo-puberulis, basi foliiformiter ampliatis, auriculato-amplexicaulibus; ea suprema minima, lanceolata vel linearia, 1—1.5 cm longa, integra vel 2—3-denticulata, breviter petiolata vel subsessilia. Capitula dis-

coidea, numerosa, ad apicem caulis cymoso-paniculato-disposita, pedunculis 1—2 mm longis, dense puberulis, bracteolis 1—2, squamiformibus. Involucrum cylindricum, 1.5—2

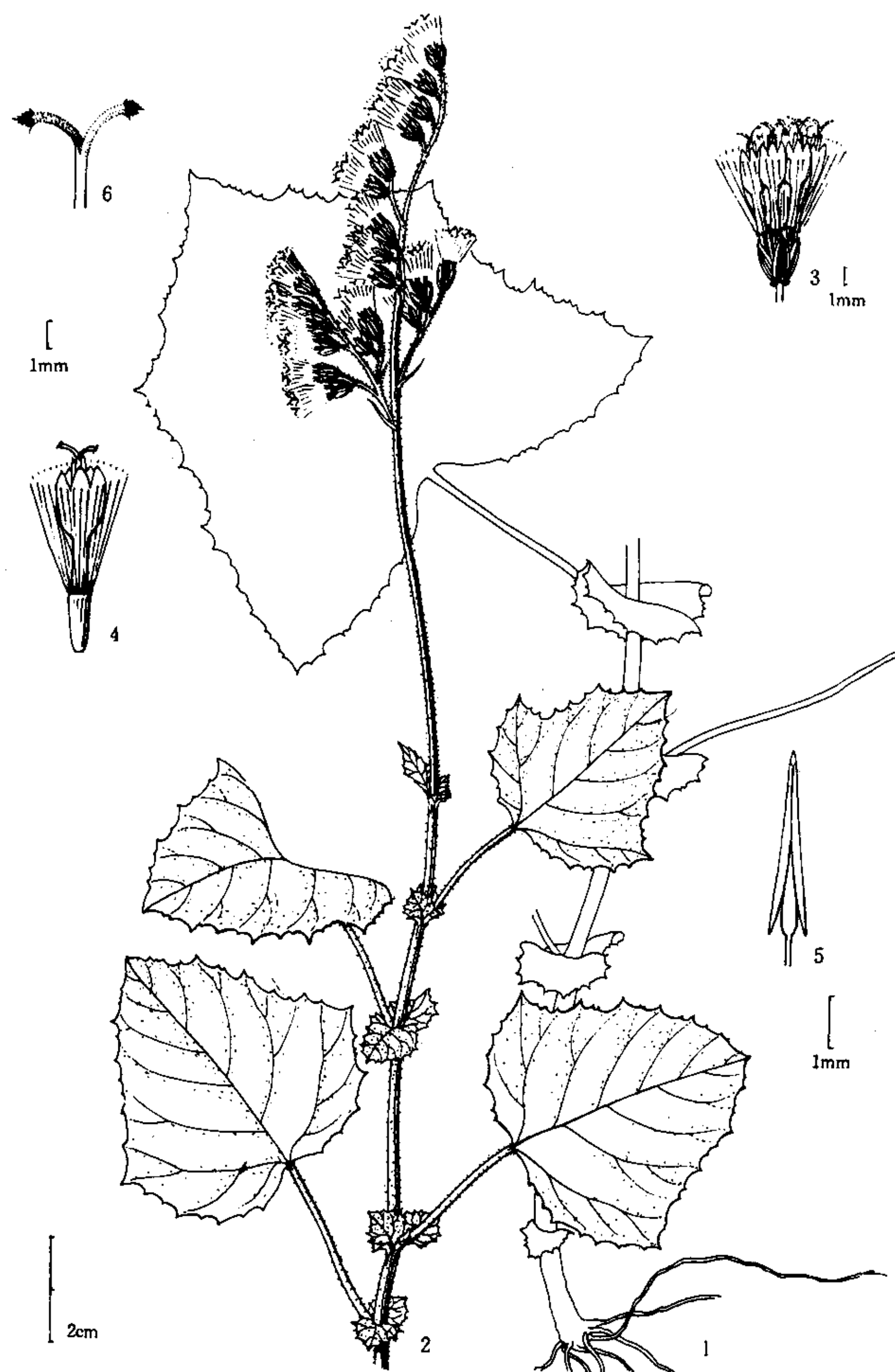


图 4 耳柄尾药菊 1, 2. 植株; 3. 头状花序; 4. 管状花; 5. 花药; 6. 花柱分枝。(张泰利绘)
Fig. 4 Synotis otophylla 1, 2. habit; 3. capitulum; 4. disc-floret; 5. anther; 6. style-arms.

mm longum et latum, basi bracteolis 1—3, subulatis; involucri phyllaria 5, subcoriacea, oblonga, 1—1.5 mm lata, purpurea, apice obtusa, margine anguste scariosa, dorso sparse puberula vel subglabra, obscure 1—3-nervia Flosculi 5, omnes tubulosi, discum conspicue superantes; corolla flavo-purpurea, 5 mm longa, tubo c. 2—2.5 mm longo, limbo anguste campanulato, lobis 5, ovato-lanceolatis, apice acutis puberulis. Antherae lineares, 3 mm longae, basi longe caudatae, collo filamenti crasso, basi leviter dilatato; styli rami apice obtusi, papillosi. Achaenia cylindrica, 2.5 mm longa, glabra; Pappi setae purpureo-brunneae, 4.5—5 mm longae.

Xizang（西藏）: Gyirong（吉隆）, Totan（托丹）, alt. 3300 m, subter sylvis Abietis, 1990-09-12, Li Bo-sheng et Li Hui（李勃生，李辉）13715（Typus, PE）

本种外形与木里尾药菊 *S. muliensis* Y. L. Chen 相似，但叶柄基部扩大成叶状，耳状抱茎；总苞片极短，紫色；小花明显伸出花盘，黄紫色；冠毛褐色与后者显然不同。

5　东川假千里光　新种　图 5

Parasenecio tongchuanensis Y. L. Chen, sp. nov.

Species forma foliorum et habitu *P. pilgeriano** (Diels) Y. L. Chen (Senecio pilgerianus Diels 1905) similis, sed a quo capitulis majoribus; phyllariis involucri et flosculis 5; lobis foliorum obovatis vel oblongo-lanceolatis, trilobatis vel irregulariter triangulato-dendatis facile differt.

Herba perennis. Rhizoma robustius, radices fibrosas numerosas emittens. Caulis erectus, 60—80 cm altus, teres, simplex, conspicue striatus, basi 5—6 mm in diam., inferne vel omnino purpurascens, glaber. Folia radicalia et inferiora sub anthesi emarcida, caulina media longe petiolata; lamina papyracea, ambitu late ovato-cordata vel flabelliformis, 13—15 cm longa, 16—18 cm lata, 5—7-palmatipartita, basi cordata vel subtruncata, lobis terminalibus majoribus, obovatis vel oblongo-lanceolatis, 8—10 cm longis, 5—7 cm latis, apice acutis vel acuminatis, ad basin sensim late cuneatis, margine irregulariter deltoideo-dentatis vel trifidis, longe mucronulatis, lobis lateralibus minoribus oblongo-lanceolatis, eis basilaribus parvis, ovato-triangulatis, 5—7-palmati-nervibus, costa nervisque palmati-nerribus subtus conspicue prominentibus, supra viridis, sparse adpresse puberula, subtus pallide viridis glabra; petiolus 3.5—8 cm longus, basi leviter dilatatus, in sicco striatus, glaber. Folia caulina superiora sursum gradatim minora, mediis conformia, 3—5-palmatipartita. Capitula discoidea, numerosa, ad apicem caulis vel in axillis foliorum superiorum anguste paniculato-disposita, subsessilia vel breviter pedicellata, basi bracteolis lineari-subulatis, 3—5 mm longis. Involucrum cylindricum, 5—8 mm longum, basi 1—2-calyculatum; phyllaria involucri 5, subcoriacea, oblonga vel oblongo-lanceolata, 5—8 mm longa, 1—1.8 mm lata, apice

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* 本种曾被林镕（1937）并入蟹甲草属 *Cacaliat* L. 中，但因该属概念有变动，应改隶 *Parasenecio* 属，故在此重新组合为 *Parasenecio pilgerianus* (Diels) Y. L. Chen, comb, nov. (*Senecio pilgerianus* Diels in Bot Jahrb. **36**: 106. 1905)

obtusa vel acutiuscula, puberula, margine scariosa, conspicue 3—5-nervulosa, dorso glabra.

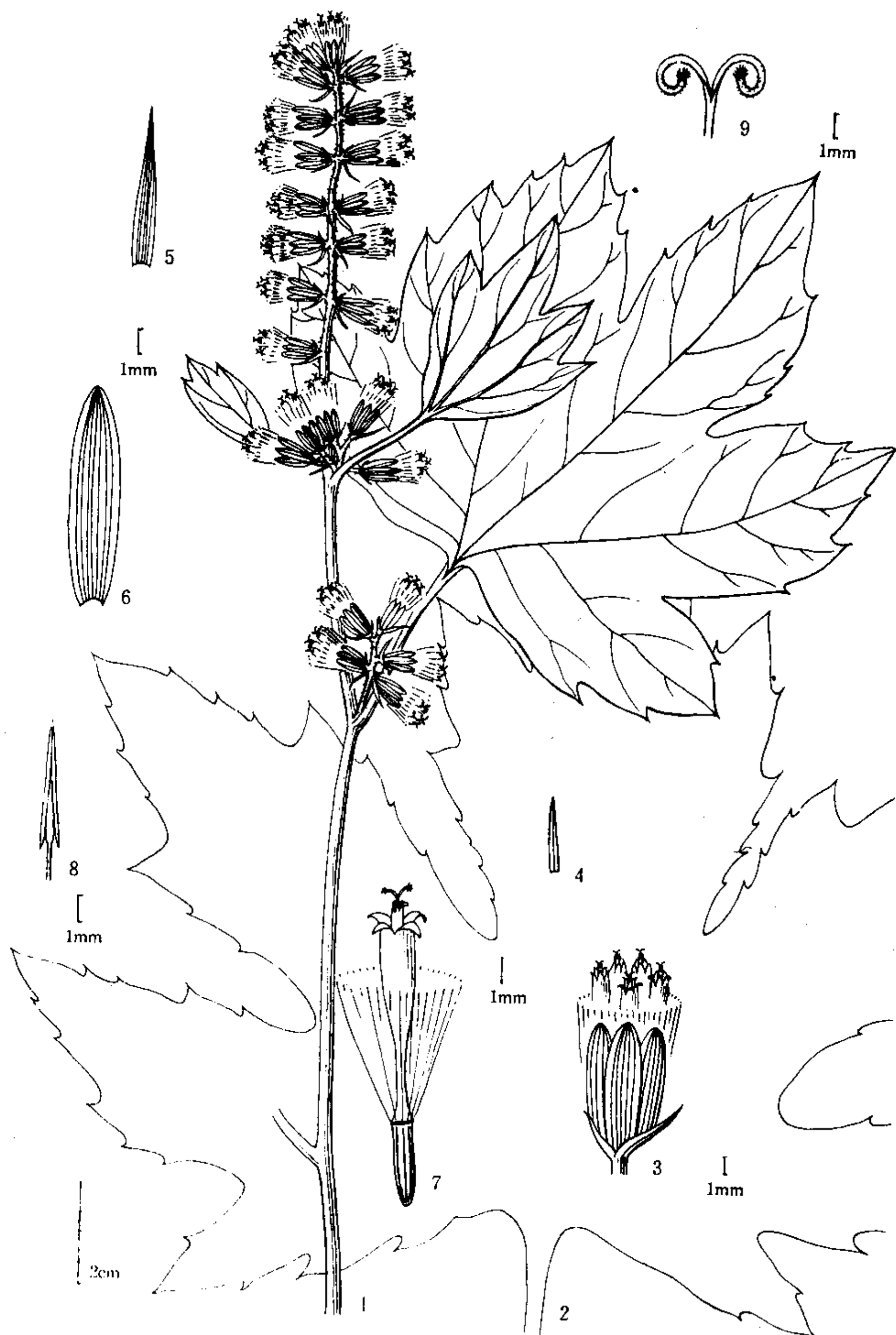


图 5 东川假千里光 1. 植株; 2. 中部茎叶; 3. 头状花序; 4, 5. 小苞片; 6. 总苞片; 7. 管状花; 8. 花药; 9. 花柱分枝。(张泰利绘)

Fig. 5 Parasenecio tongchuanensis 1. habit; 2. median cauline leaf; 3. capitulum; 4, 5. bracts of calyculus; 6. phyllary; 7. disc-floret; 8. anther; 9. style-arms.

Flosculi 5, omnes tubulosi, discum conspicue superantes; corolla flava, 8—9 mm longa, tubo 3—3.5 mm longo, limbo infundibulari, lobis 5, ovato-lanceolatis, apice acutis. Antherae lineares, 4 mm longae, basi longe caudatae, collo filamenti cylindrici non dilatato; styli rami recurvati, apice obtusi, papillosi. Achaenia cylindrica, 3—4 mm longa, glabra, costata. Pappi setae flavo-brunneae, 7—8 mm longae.

Yunnan (云南): Tongchuan (东川), Yenminsanfengkou (因民三风口), alt. 3500 m, in rupestris, 1986-09-21, Lang Shun-bin (蓝顺彬) 733 (Typus, PE). **Guizhou** (贵州): He Zhang (赫章), Caishentang ad Shiping (财神塘至石坪), alt. 1650 m, 1957-10-12, Yu Ping-hua (禹平华) 1364.

本种叶形和外形似太白假千里光 *P. pilgerianus* (Diels) Y. L. Chen，但头状小序较大；总苞片和小花 5；叶的裂片倒卵形或长圆状披针形，三裂或具不规则三角状齿，与后者容易区别。



第三届全国系统与进化植物学青年学术研讨会在广州召开

由中国植物学会主办、中国科学院华南植物所承办的第三届全国系统与进化植物学青年学术研讨会，于 1994 年 12 月 12 日至 16 日在花城广州隆重举行。来自全国各地的青年植物学工作者 100 多人参加了会议。会上共收到论文摘要 110 多篇，覆盖了植物分类系统学（广义）的各个研究领域和方向。在开幕式上，中国科学院华南植物所所长致开幕词，广东省植物学会、广东省科学技术协会有关领导同志讲了话，表达了他们对青年植物学工作者的殷切期望及对他们工作的大力支持。会上，中山大学张宏达教授作了专题报告“被子植物的起源与演化”。不少青年学者在大会作了学术报告，包括以下几方面：植物分类学与系统学（含分子系统学），古植物学，植物区系学与植物地理学，数量分类学和分支系统学，植物形态解剖学，植物细胞分类学，物种生物学及植物多样性，计算机应用及数据库等。这些报告反映了近三年来青年植物学工作者在本学科领域取得的丰硕成果。会议充满了热烈的学术气氛，最后由代表们投票选定本研讨会的第四届大会将于 1996 年在昆明举行。

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